

AUTHOR INDEX, VOLUME 7, 1989

- Abello, R., 283
 Adair, E.R., 25
 Aguirre Vila-Coro, A., 105
 Akoka, S., 619
 Alameda, J.C., Jr., 411
 Antich, P.P., 475
 Aretz, T., 79
 Ashby, P., 369
 Azizkhan, R.G., 689

 Babcock, E.E., 475
 Bacic, G., 411
 Bakker, C.J.G., 305, 405
 Ballas, S.K., 39
 Ballon, D., 155
 Barloon, T.J., 635
 Bayliss, A.P., 677
 Beers, G.J., 309
 Benjamin, R., 283
 Benozio, M., 55
 Berglund, L.G., 25
 Bernardino, M.E., 363
 Besson, J.A.O., 141, 289
 Blumberg, B., 629
 Bock, E., 179
 Boethius, J., 599
 Bomsdorf, H., 547
 Bongartz, G., 179
 Bourque, A., 457
 Brady, T.J., 79, 109
 Brandhorst, J., 1
 Braun, L.D., 605
 Breslau, N.A., 187
 Brix, G., 357
 Brookeman, J.R., 487
 Brooks, M., 437
 Brown, T.R., 163, 629
 Buetow, K., 629
 Burk, D.L., Jr., 39
 Burns, T.L., 643
 Butler, I.J., 133

 Cabanis, E.A., 55
 Carlier, P., 173

 Chaloupka, J.C., 363
 Chelmow, D., 517
 Chen, M.C.-M., 1
 Cherryman, G.R., 677
 Chezmar, J.L., 363
 Chiang, F.L., 635
 Cittadini, G., 95
 Cline, H.E., 45
 Cohen, M.S., 163
 Colletti, P.M., 217
 Condon, B.R., 395
 Constantinesco, A., 173
 Crawley, A.P., 383
 Cullis, P., 417

 Davis, K.A., 669
 DeBoise, D.A., 669
 Degryse, H.R., 241
 Dominguez, R., 105, 567
 Donald, R.T., 677
 Done, S.L., 681
 Dorrenbos, H., 297
 Dragotakes, D., 79
 Duerk, J.L., 251

 Eisenberg, B., 571
 El Rahman, M., 687
 Engelstad, B.L., 1
 Erdman, W.A., 187
 Erenberg, A., 145
 Ericsson, A., 655
 Ermias, A., 619
 Evans, H.L., 283

 Fantazzini, P., 343
 Fatouros, P.P., 69
 Fei, D.Y., 69
 Fenstermacher, M., 567
 Ferrucci, J.T., 1
 Flanders, A.E., 333
 Fleagle, S.R., 643
 Foster, M.A., 141, 289
 Freling, N.J.M., 297
 Freund, Y., 101

 Freund-Levi, Y., 225
 Fullerton, W.T., 677
 Furuse, M., 9

 Gabriele, O.F., 565
 Garber, H.J., 605
 García, J.F., 571
 Gerberich, J.L., 475
 Ghaed, N., 681
 Gheuens, J., 241
 Gilbert, J.J., 463
 Globits, S., 611
 Glogar, D., 611
 Glover, G.H., 45
 Gordin, S.J., 565
 Gore, J., 517
 Graham, M.C., 155
 Greco, A., 351
 Greentree, S.G., 141
 Greitz, D., 655
 Gries, P., 173
 Gückel, F., 357
 Gupta, R.K., 293

 Haacke, E.M., 445
 Hadley, D.M., 395
 Hals, P.-A., 649
 Hammer, B.E., 235
 Hanafee, W., 575
 Hardy, P.A., 265
 Harms, S.E., 195
 Harrell, R., 187
 Haygood, T.M., 571
 Hays, M.B., 571
 Hazle, J.D., 133
 Hazuka, M.B., 669
 Heckert, B., 173
 Henkelman, M., 89
 Henkelman, R.M., 265, 369, 383
 Henriksen, O., 231, 557, 655
 Herfkens, R.J., 45, 517
 Hickey, D.S., 17
 Higgins, W.L., 565

- Hillier, V.F., 17
Holland, S.K., 339
Holtman, S., 425
Horbach, T., 179
Horton, K.M., 689
Howe, F.A., 127
- Iannone, A., 411
Ichihara, K., 9
Inao, S., 9
Isherwood, I., 17
Israel, J., 629
Izawa, A., 9
- Jackson, E.F., 133
Jallet, P., 619
Janus, C.L., 693
Javitt, M.C., 561
Jelinek, J.S., 681
Jena, A., 293
Jenkins, A., 395
Jenkins, J.P.R., 17
Jensen, K.E., 231, 557
Johnson, G.A., 45
Johnston, D.L., 79, 109
Jolesz, F.A., 437
Joy, M., 89
- Kamman, R.L., 297
Kanal, E., 541
Kaneoke, Y., 9
Kantor, H.L., 79
Kao, S.C.S., 635
Karlik, S.J., 463
Kim, E.E., 283
Kindstrand, E., 599
Kinzie, J.J., 669
Kishore, P.R.S., 69
Kollmer, C., 561
Komu, M., 649
Koops, H.S., 297
Kormano, M., 649
Koutcher, J.A., 155
Kraft, K.A., 69
Kucharczyk, W., 383
Kulkarni, M.V., 133, 203
Kumar, S., 293
Kwee, I.L., 543
- Laissy, J.P., 55
Lange, R.C., 457, 693
Langkowski, J.H., 547
Larsson, H., 655
Law, A.N.R., 677
- Le Jeune, J.J., 619
Leibfritz, D., 547
Lendinara, L., 343
Lenz, G.W., 445
Lester, P.D., 591
Letcher, J.H., 581, 585, 591
Levey, M.S., 689
Levy, D., 39
Li, K.C.P., 687
Liang, M.D., 541
Lissner, J., 425
Liu, P., 109
London, W.T., 629
Lorensen, W.E., 45
Lorenz, W.J., 357
Lorigan, J.G., 211
Lufkin, R.B., 575, 605
Lutrario, D.M., 109
- Maas, R., 547
MacDougall, P., 417
Magin, R.L., 411
Mahajan, H., 211, 283
Malko, J.A., 363
Mallard, J.R., 677
Marions, O., 101, 599
Martin, J.-J., 241
Martinoli, C., 95
Mason, R.P., 475
Mayr, H., 611
McCarthy, S., 457
McGlone, J.S., 119
McGowan, J.E., 145
McVeigh, E.R., 383
Meese, R., 517
Mehring, 635
Mehta, S., 203
Metcalf, D.C., 437
Miller, D.D., 79
Miodownik, S., 155
Misra, L.K., 277
Mitchell, D.G., 39
Moerland, M.A., 305, 405
Mogelvang, J., 655
Mooyart, E.L., 297
Motegi, Y., 9
Mugler, J.P., III, 487
Mulkern, R.V., 437
- Nakada, T., 543
Narayana, P.A., 133, 203, 277
Narayanan, K., 541
Negro-Vilar, R., 517
Nelson, R.C., 363
- Neuhold, A., 611
Newell, J.B., 79
Niemi, P., 649
Nordell, B., 655
Noseworthy, J.H., 463
Novello, F., 343
Nunnally, R.L., 475
- Offerman, W., 547
Okada, R.D., 79, 109
Oldendorf, W.H., 605
Owl-Smith, F.A., 689
- Paajanen, H., 649
Palmer, N., 351
Pattany, P.M., 251
Patterson, J., 395
Patz, S., 437
Peer, F., 425
Peersman, G.V., 241
Perdrisot, R., 619
Persson, B., 655
Piccirillo, M., 457
Plewes, D.B., 369
Poon, C.S., 369
Pope, C., 517
Pouliquen, D., 619
- Quinn, S.F., 529
- Rao, V.M., 39, 333
Raval, B., 203
Rebibo, G., 55
Reiman, V., 425
Rennschmid, C., 425
Requardt, H., 179
Rifkin, M.D., 39
Rimmington, J.E., 141
Rindahl, M.A., 217
Rittgers, S.E., 69
Robertson, E.M., 677
Ros, P.R., 687
Rudberg, U., 101
Rudd, S.A., 681
- Sääf, J., 101, 225, 599
Saini, S., 1
Saloner, D., 61
Sanchez, R.B., 529
Saso, K., 9
Sato, Y., 635
Satragno, L., 95
Saucedo, J., 567

Sauter, R., 425
 Schad, L.R., 357
 Schedel, H., 425
 Schellas, K.P., 495
 Schiebler, M.L., 689
 Schochet, S.S., Jr., 149
 Scholz, T.D., 643
 Scott, G., 89
 Secrist, R.D., 149
 Semmler, W., 357
 Setiawan, H., 187
 Sherk, H.H., 561
 Sherry, C.S., 195
 Shirkhoda, A., 211
 Silver, M.S., 119
 Sinha, S., 575
 Sinha, U., 575
 Sivewright, G., 17
 Skinner, E.R., 289
 Skorton, D.J., 643
 Slopis, J.M., 133
 Smith, F.W., 115, 116, 117, 118, 677
 Smith, R.C., 561
 Snyder, W., 187
 Sostman, H.D., 517

Sperber, G., 655
 Ståhlberg, F., 655
 Stark, D.D., 1
 Stehling, M., 17
 Steiner, R.M., 39
 Stuart, P.L., 681
 Stubgaard, M., 655
 Swartz, H.M., 411
 Szumowski, J., 369

 Taber, P., 217
 Te Strake, L., 297
 Teasdale, G.M., 395
 Tertti, M., 649
 Thomsen, C., 231, 557, 655
 Tilcock, C., 417
 Traynelis, V., 149
 Trotot, P.M., 55
 Truyen, L., 241
 Tsang, Y.-M., 1

 Unger, E.C., 119, 163, 417, 629

 Van de Vyver, F.L., 241
 Vinee, P., 173
 Vogl, T., 425

Wackers, F.J., 517
 Wahlund, L.-O., 101, 225, 599
 Wallace, S., 283
 Weatherall, P., 187
 Weinreb, J.C., 187
 Weir, J., 677
 Weissleder, R., 1
 Westphal, M., 547
 Wetterberg, L., 225, 599
 Wheatley, D.N., 289
 White, D.L., 1
 White, R.D., 445
 Wieland, J., 547
 Wilkens, K., 517
 Williamson, M.R., 571
 Wong, C., 463

 Yamanashi, W.S., 591
 Yoshida, K., 9
 Yuh, W.T.C., 635

 Zahler, R., 517
 Zaret, B.L., 517
 Zee, C.S., 217
 Zizen, M.T.I., 55

KEYWORD INDEX, VOLUME 7, 1989

- ¹H MRI, 475
- ¹³C NMR, 235
- ¹⁹F MRI, 475, 543
- ³¹P-NMR spectroscopy, 231
- Abdominal application, 297
- Animal imaging, 155
- Animal model, 1
- Aorta, 45
- Arterial wall, 173
- Arthritis, 495
- Artifact reduction, 251
- Avascular necrosis, 495
- Azygous continuation, 681
- Bandwidth, 487
- Birth weight, 145
- Blood, 655
- Blood-brain barrier (BBB), 9
- Blood-brain barrier permeability, 605
- Body temperature, 25
- Bone infarction, 39
- Brain, 225
- Brain diseases, 669
- Brain, effects of irradiation on, 669
- Brain hemorrhage, 149
- Brain, MR studies, 669
- Brain studies, 241
- Brain tumor, 9
- CSF, 655
- Cancer, 425
- Cardiac MR, 109
- Cardiac imaging, 445
- Cardiac triggering, 119
- Cardiovascular, 45
- Carotid artery, 45
- Cartilage disorders, 179
- Cerebral blood vessels, occlusion, veins, 149
- Chemical-shift imaging, 369
- Chemotherapy changes, 211
- Chordoma, 689
- Chronic alcoholism, 289
- Color Doppler imaging, 611
- Computed tomography, 635
- Computer-assisted classification, 599
- Computerized tomography, 187
- Congenital heart disease, 681
- Congenital spinal anomalies, MRI, 217
- Contrast agent, 417, 619, 649
- Data analysis, 357
- Data compression, 127
- Data sampling period, 487
- Deadspace, 145
- Decoupling, 235
- Degeneration, 495
- Degenerative arthritis, 179
- Demyelinating disease, 241
- Demyelination, 463
- Density, 89
- Design of MRI coils, 585
- Diagnosis, 105
- Diffusion, 411
- Display techniques, 405
- Elasticity, 173
- Electric current, 89
- Electromagnetic field effects, 605
- Electromagnetic fields, 309
- End-tidal carbon dioxide levels (ETCO₂), 145
- Epidermoid, 293
- Experiment design, 405
- Experimental allergic encephalomyelitis, 463
- Extradural, 351
- FISP, 163
- FLASH, 163
- Fast field echo, 297
- Fast imaging, 445
- Fast magnetic resonance imaging, 203
- Fat metabolism, 133
- Fatty liver model, 343
- Ferromagnetics, 649
- Flow, 655
- Flow imaging, 69, 445
- Flow velocity quantitation, 61
- Fluorocarbon, 475
- Fluphenazine, 543
- Fourth ventricular lesions, 635
- Gadolinium-DTPA, 9
- Glioma, 599
- Gradient echo, 655
- Gradient moments, 251
- Gradient-echo imaging, 163, 445
- HIV transfusion injection, 225
- Heart rate, 145
- Heart, 45
- Heat loss, 25
- Helmholtz coil, 179
- Hemifacial spasm, 565
- Hemihypertrophy, 565
- Hemodynamics, 69
- Hemorrhage, 163
- Hepatocyte, 411
- Hip, 179
- Human skeletal muscle, 231
- Hydraencephaly, 105
- IR multiexponential behavior, 343
- Image processing, 517
- Imaging, 235
- In vivo brain tissue, 437
- Inflammation, 495
- Inflow-outflow techniques, 61
- Injury, 495
- Internal derangement, 495
- Intradural, 351
- Intrauterine, 105
- Iophendylate, 293
- Iron, 629

- Left ventricular hypertrophy, 517
- Lipid T_1 , 277
- Liposomes, 417
- Liver tumor, 1
- Liver, 203, 619, 629
- Low bandwidth, 119
- Lung, 55
- Lung, surgery, 55

- MR biopsy needle, 575
- MR, bipolar sequences, 119
- MR relaxation parameters, 109
- MR spectroscopy, 109
- MR studies, 55
- MR tissue characterization, 109
- MRI artifacts, 575
- MRI, bloodflow, 101
- MRI, body, 457
- MRI, pediatric spine, 217
- MRI, spinal dysraphism, 217
- MRI, surface coils, 581
- MRI, synovial, 529
- Magnetic resonance (MR), 9, 45, 105, 187, 309, 369, 649, 655
- Magnetic resonance, comparative studies, 55
- Magnetic resonance evaluation, 203
- Magnetic resonance imaging (MRI), 1, 69, 95, 127, 145, 149, 179, 211, 241, 283, 293, 297, 333, 351, 357, 417, 487, 517, 565, 585, 599, 605, 611, 629, 635, 681, 689
- Magnetic resonance spectroscopy, 133, 425
- Magnetic resonance tissue characterization, 195
- Malignant fibrous histiocytoma, 283
- Magnetite, 411
- Mannitol, 79
- Marrow infarction, 39
- Mathematical model, 25
- Measurement, 89
- Mechanical rate, 145
- Metastases, 1
- Metastasis, 351
- Microcapsules, 619
- Minimum deadspace manifold, 145
- Mitochondrial cytopathy, 133

- Mitral regurgitation, 611
- Mucocele, 333
- Multiexponential relaxation, 357
- Multiple sclerosis, 241, 463
- Murine tumors, 475
- Muscle atrophy, 277
- Muscles neoplasm, 195
- Muscular dystrophy, 277
- Myocardial infarction, 79
- Myocardium, 643

- Nanoparticles, 619
- Neonate, 145
- Neuroleptics, 543
- Nonlinear optimization, 585
- Non-mechanical rate, 145
- Normal liver, 343
- Nuclear magnetic resonance, 79

- Optimized RF pulse, 119
- Oxygen saturation ($O_2\text{Sat}$), 145

- Pancreas, 457
- Parameter images, 405
- Parathyroid neoplasms, 187
- Pediatric neoplasms, 689
- Pelvic mass, 689
- Penis anatomy, 95
- Phakomatosis, 565
- Phase image, 655
- Polysplenia syndrome, 681
- Proton relaxation times, 289
- Proton relaxometry, 343

- Quantification, 369, 655
- Quantitative magnetic resonance imaging, 17

- RF energy deposition, 25
- Rat brain regions, 141
- Receptor imaging, 543
- Red blood cells, 289
- Regressive remodelling, 495
- Relaxation, 411
- Relaxation times, 173, 369
- Respiratory rate, 145
- Restricted skin blood flow, 25
- Rotating frame, 437

- SAR, 25
- SCA, 39
- Scintigraphy, 187
- Signal-to-noise, 487

- Single echo sequence, 119
- Single limb ventilator tubing, 145
- Sinus, 101
- Sinus inflammatory disease, 333
- Sinus inversus, 681
- Skeletal occlusion, 495
- Slice profile, 61
- Soft tissues neoplasms, 195
- Solenoids, 155
- Spectroscopy, 475
- Spin-lattice relaxation, 437, 643
- Spin-spin relaxation, 643
- Spinal cord (cervical), 241
- Spine, 351
- Superparamagnetic iron oxide, 619
- Surface coil, 95
- Surface coils, 585
- Sweating, 25
- Synovial sarcoma, 211

- T_1 , 9
- T_1 relaxation times, 225, 231
- T_1 and T_2 relaxation times, 141, 357
- Temporomandibular joint (TMJ), 495
- Tendons, MR studies, 195
- Thermal discomfort, 25
- Thorax, MR studies, 55
- Three-dimensional, 45
- Thrombosis, 101, 149
- Tissue characterization, 17, 357, 517, 599, 643
- Transcutaneous oxygen (TcO_2) and carbon dioxide (TcO_2) levels, 145
- Trifluoperazine, 543
- Tumor axilla, adult, 561
- Tumors, 425
- Turbulent flow, 251

- Ultra-low field, 101, 599
- Ultra low field magnetic resonance imaging, 225
- Ultrasound, 187

- Vertebral bodies, 17

- Water T_1 , 277
- Water content, 141, 289

